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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 08/06/2008

Lynn L. Augspurger IBM Corporation 2455 South Road, P386 Poughkeepsie, NY 12601 EXAMINER
RUTZ, JARED IAN
ART UNIT PAPER NUMBER

DATE MAILED: 08/06/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,252	06/25/2003	Thomas J. Heller JR.	POU920030046US1	3685

 ${\tt TITLE~OF~INVENTION:~MULTIPROCESSOR~COMPUTER~SYSTEM~HAVING~MULTIPLE~COHERENCY~REGIONS~AND~SOFTWARE~PROCESS~MIGRATION~BETWEEN~COHERENCY~REGIONS~WITHOUT~CACHE~PURGES~\\$ 

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/06/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includired below or directed oth	ng the Patent, advance on herwise in Block 1, by (a	rders and notification of n a) specifying a new corres	pondence address; a	ll be m	nailed to the current (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper; such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
Lynn L. Augsp IBM Corporatio 2455 South Roa	n d, P386	/2008	Lhe	Certi	ficate o	of Mailing or Transi Transmittal is being	nission deposited with the United t class mail in an envelope above, or being facsimile tte indicated below.
Poughkeepsie, N	IY 12601						(Depositor's name)
			_				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTOR	NEY DOCKET NO.	CONFIRMATION NO.
		COMPUTER SYSTEM ONS WITHOUT CACHI	Thomas J. Heller JR. HAVING MULTIPLE OF PURGES	OHERENCY REGI		920030046US1 AND SOFTWARE P	3685 ROCESS
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nonprovisional	NO	\$1440	\$300	\$0		\$1740	11/06/2008
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
RUTZ, JA	RED IAN	2187	7II-I41000				
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DAT/ less an assignee is ident h in 37 CFR 3.II. Comp	nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON	(I) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent atto listed, no name will be FHE PATENT (print or typ data will appear on the p. T a substitute for filing an (B) RESIDENCE: (CITY)	rely,  e firm (having as a regent) and the names meys or agents. If no printed.  ec)  atent. If an assigned assignment.	nember s of up o name	ra 2to to 3	ocument has been filed for
4a. The following fee(s)		categories (will not be pu	o. Payment of Fee(s): (Plea		•		up entity Government
☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			A check is enclosed.      Payment by credit card. Form PTO-2038 is attached.      The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
	s SMALL ENTITY state	is. See 37 CFR 1.27.	b. Applicant is no long	ger claiming SMALI	ENTI	TY status. See 37 CF	R 1.27(g)(2).
interest as shown by the	d Publication Fee (it req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than the Office.	he applicant; a regist	ered att	torney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name			Registration No				
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but firginia 22313-1450. DC 13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 m idual case. Any con r, U.S. Patent and T D THIS ADDRESS.	e public inutes t iments radema SEND	which is to file (and to complete, including on the amount of tin ark Office, U.S. Depa TO: Commissioner f	by the USPTO to process) g gathering, preparing, and ne you require to complete atment of Commerce, P.O. for Patents, P.O. Box 1450,

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Lynn L. Augspurger			RUTZ, JARED JAN	
IBM Corporation			ART UNIT	PAPER NUMBER
2455 South Road, P386 Poughkeepsie, NY 12601			2187 DATE MAII ED: 08/06/200	8

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 851 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 851 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Notice of Allowability

Application No.	Applicant(s)
10/603,252	HELLER, THOMAS J.
Examiner	Art Unit
IAPED I PUTZ	2107

The MAILING DATE of this communication appears on t All claims being allowable, PROSECUTION ON THE MERITS IS OR RED herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other NOTICE OF ALLOWABILITY IS NO	MAINS) CLOSED in this application. If not included appropriate communication will be mailed in due course. THIS This application is subject to withdrawal from issue at the initiat					
<ol> <li>This communication is responsive to <u>4/21/2008</u>.</li> </ol>						
<ol> <li>The allowed claim(s) is/are <u>1-30</u>.</li> </ol>						
International Bureau (PCT Rule 17.2(a)). * Certified copies not received:	celved. ceived in Application No have been received in this national stage application from the					
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this conoted below. Failure to timely comply will result in ABANDONMENT of the THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.						
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.						
CORRECTED DRAWINGS ( as "replacement sheets") must be sub- (a)	ent Drawing Review (PTO-948) attached  ment / Comment or in the Office action of  ould be written on the drawings in the front (not the back) of					
CEPOSIT OF and/or INFORMATION about the deposit of Bit attached Examiner's comment regarding REQUIREMENT FOR THI attached Examiner's comment regarding REQUIREMENT FOR THI	OLOGICAL MATERIAL must be submitted. Note the					
Attachment(s)  1. Motice of References Cited (PTO-892)  2. Notice of Draftperson's Patent Drawing Review (PTO-948)  3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. Notice of Informal Patent Application 6. Interview Summary (PTO-413), Paper No./Mail Date 7. Examiner's Amendment/Comment 8. Examiner's Statement of Reasons for Allowance 9. Other					

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#### EXAMINER'S AMENDMENT

 An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lynn Augspurger (Reg. No. 24,227) on 7/29/2008.

The application has been amended as follows:

In claim 1, line 12, change "chache" to --cache--.

In claim 1, line 24, after "established" insert --until--.

- The following is an examiner's statement of reasons for allowance:
- 3. Claim 1 recites the limitation "and when said supervisor software program is moving a coherency region from one distinct set of old processing nodes to another distinct set of processing nodes it is leaving behind old cache entries for the coherency region on old nodes and ensures that these old cache entries will be seen by incoming storage requests originating from new processing nodes and that cache entries for main storage addresses in the new processing nodes will not be established until the old entries are invalidated". Said limitation is taught by the specification as originally filed at least at second claim 27, renumbered as claim 31 and cancelled in the response

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submitted 12/23/2008. Said limitation, in combination with the other recited limitations of claim 1, is not taught or suggested by the prior art of record.

- Claims 2-27 depend from claim 1, and are considered allowable for at least the same reasons as claim 1.
- 5. Claim 28 recites the limitation "said supervisor software creates a table in the multiprocessor computer system for each processing node which table has an entry for every Coherency Region ID that is currently allowed to be dispatched on said processing node". Said limitation is taught by the specification as originally filed at page 11 line 30 through page 12 line 2. Said limitation, in combination with the other recited limitations of claim 28, is not taught or suggested by the prior art of record.
- Claims 29-30 depend from claim 28, and are considered allowable for at least the same reasons as claim 28.
- Foster et al. (US 7,065,761) teaches the use of tables for managing logical partitions, but does not teach or suggest said limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JARED I. RUTZ whose telephone number is (571)272-5535. The examiner can normally be reached on M-F 8:00 AM - 4:30 PM.

Application/Control Number: 10/603,252

Art Unit: 2187

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Ellis can be reached on (571)272-4205. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jared I Rutz Examiner Art Unit 2187

jir

/Kevin L Ellis/ Acting SPE of Art Unit 2187